

WHAT IS CLAIMED IS:

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1. A radiopaque stent comprising a cylindrical main body comprising a cobalt chromium alloy that comprises cobalt, chromium, and one or more radiopaque materials.

2. The radiopaque stent of claim 1, wherein the cobalt chromium alloy is balloon expandable.
3. The radiopaque stent of claim 2 wherein the main body has a first unexpanded outside diameter of about 0.04 to about 0.10 inches and a second expanded diameter of at least about 1 to 15 millimeters.
4. The radiopaque stent of claim 1 wherein the main body has a wall thickness of at least about 0.001 inches.
5. The radiopaque stent of claim 1 further comprising nickel.
6. The radiopaque stent of claim 1 wherein the radiopaque materials are selected from the group comprising Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Ba, La, Hf, Ta, W, Re, Os, Ir, Pt, Au and combinations of these materials.
7. The radiopaque stent of claim 1 wherein the tubular main body comprises an undulating pattern.
8. The radiopaque stent of claim 1 wherein the tubular main body is a solid radiopaque tube.

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holes.

~~The radiopaque stent of claim 6 wherein the solid radiopaque tube defines~~

10. The radiopaque stent of claim 1 wherein the cylindrical main body is coiled.

11. The radiopaque stent of claim 1 wherein the cylindrical main body is ratcheted.

12. The radiopaque stent of claim 1 wherein the cylindrical main body defines a backbone.

13. The radiopaque stent of claim 1 wherein the cylindrical main body is expandable.

14. The radiopaque stent of claim 1 wherein the chromium concentration is about 10 to 25 percent by weight.

15. The radiopaque stent of claim 1 wherein the concentration of radiopaque materials is about 10 to 30 percent by weight.

16. The radiopaque stent of claim 1 wherein the concentration of nickel is about 5 to 30 percent by weight.

17. ~~The radiopaque stent of claim 1 wherein the main body is visible but does not obscure the underlying vessel morphology when subjected to imaging.~~

18. The radiopaque stent of claim 1 wherein the cylindrical main body comprises one or more wires comprising cobalt, chromium and one or more radiopaque materials, wherein the wires are shaped to form the cylindrical main body.

19. An assembly, comprising:
a catheter; and
a radiopaque stent mounted on the catheter, wherein the stent comprises a cobalt chromium alloy that comprises cobalt, chromium and one or more radiopaque materials.

20. The assembly of claim 19 wherein the radiopaque materials are selected from the group comprising Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Ba, La, Hf, Ta, W, Re, Os, Ir, Pt, Au and combinations of these materials.

21. The assembly of claim 19 and further comprising a balloon mounted to the catheter, the balloon positioned to expand the radiopaque stent.

22. A method for making a radiopaque stent, comprising:
providing a tube comprising a cobalt chromium alloy that comprises cobalt, chromium and one or more radiopaque materials; and
shaping the tube to form the radiopaque stent.

23. The method of claim 22 wherein the tube is shaped by cutting or etching.

24. The method of claim 22 wherein the tube is cut by a laser.

25. The method of claim 22 and further comprising cleaning the radiopaque stent.
26. The method of claim 22 and further comprising providing a flat stock comprising the cobalt chromium alloy that comprises cobalt, chromium and one or more radiopaque materials; rolling the flat stock and welding the flat stock to form the tube.
27. The method of claim 22 wherein the tube is shaped by near net shape manufacturing.
28. The method of claim 27 wherein the near net shape manufacturing comprises metal injection molding.
29. A method for positioning a stent in a lumen of a living being, comprising:
providing a radiopaque stent comprising a cylindrical main body comprising a cobalt chromium alloy that comprises cobalt, chromium, and one or more radiopaque materials wherein the stent is unexpanded;
transporting the radiopaque stent to a lesion site in the lumen wherein the stent is optionally imaged during transport; and
expanding the radiopaque stent to contact the lesion wherein the stent is imaged during or after expanding the radiopaque stent.
30. A radiopaque stent comprising one or more wires, the wires comprising a cobalt chromium alloy that comprises cobalt, chromium and one or more radiopaque materials.

31. The radiopaque stent of claim 30 wherein the wire or wires are balloon expandable.
32. The radiopaque stent of claim 30 wherein the wire or wires are self-expanding.
33. The radiopaque stent of claim 30 wherein the radiopaque materials are selected from the group comprising Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Ba, La, Hf, Ta, W, Re, Os, Ir, Pt, Au and combinations of these materials.
34. A radiopaque stent comprising a tube, the tube comprising a cobalt chromium alloy that comprises cobalt, chromium and one or more radiopaque materials.
35. The radiopaque stent of claim 34 wherein the tube is balloon expandable.
36. The radiopaque stent of claim 34 wherein the tube is self-expanding.
37. The radiopaque stent of claim 34 wherein the radiopaque materials are selected from the group comprising Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Ba, La, Hf, Ta, W, Re, Os, Ir, Pt, Au and combinations of these materials.

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